

Q590
10/11 #3

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/885,478

DATE: 10/04/2001
TIME: 17:56:10

Input Set : A:\PTO_VSK.txt
Output Set: N:\CRF3\10042001\I885478.raw

3 <110> APPLICANT: SALON, JOHN A
 4 LAZ, THOMAS M
 5 NAGORNY, RAISA
 6 WILSON, AMY E
 8 <120> TITLE OF INVENTION: DNA ENCODING A HUMAN MELANIN CONCENTRATING HORMONE RECEPTOR
 (MCH1) AND
 9 USES THEREOF
 11 <130> FILE REFERENCE: 1795/57453-A-PCT-US
 13 <140> CURRENT APPLICATION NUMBER: 09/885,478
C--> 14 <141> CURRENT FILING DATE: 2001-09-24
 16 <150> PRIOR APPLICATION NUMBER: PCT/US99/31169
 17 <151> PRIOR FILING DATE: 1999-12-30
 19 <160> NUMBER OF SEQ ID NOS: 28
 21 <170> SOFTWARE: PatentIn version 3.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 1269
 25 <212> TYPE: DNA
 26 <213> ORGANISM: HOMO SAPIENS
 28 <400> SEQUENCE: 1
 29 atgtcagtgg gagccatgaa gaaggagtg gggagggcag ttgggcttgg aggcggcagc 60
 31 ggctgccagg ctacggagga agaccccatt cccgactgcg gggcttgcgc tccgggacaa 120
 33 ggtggcaggc gctggaggt gcccgcgcct gcgtgggtgg aggggagctc agctcggttg 180
 35 tgggagcagg cgaccggcac tggctggatg gacctggaag cctcgctgct gcccaactgg 240
 37 cccaatgcca gcaacaccc tcgtggcccc gataacctca cttcagcagg atcacctcct 300
 39 cgcacgggga gcacatcccta catcaacatc atcatgcctt cgggtttcgg caccatctgc 360
 41 ctcctgggca tcacggaaa ctccacggtc atcttcgcgg tcgtgaagaa gtccaagctg 420
 43 cactggtgca acaacgtccc cgacatcttc atcatcaacc tctcggttagt agatctcctc 480
 45 tttctcctgg gcatgcctt catgatccac cagctcatgg gcaatgggt gtggacttt 540
 47 ggggagacca tgtgcacctt catcacggcc atggatgcca atagtcagtt caccagcacc 600
 49 tacatcctga ccgcacatggc cattgaccgc tacctggcca ctgtccaccc catctttcc 660
 51 acgaagttcc ggaagccctc tgtggccacc ctgtgtatgc gcctcctgtg ggcctctcc 720
 53 ttcatcagca tcacccctgt gtggctgtat gccagactca tcccctccc aggaggtgca 780
 55 gtgggctgcg gcatacgcct gccaaccca gacactgacc tctactggtt caccctgtac 840
 57 cagttttcc tggccttgc cctgccttt gtggctcatca cagccgcata cgtgaggatc 900
 59 ctgcagcgcata tgacgtcctc agtggccccc gcctcccgac gcacgcattcg gctgcggaca 960
 61 aagagggta cccgcacagc catgccttc tgtctggtct tctttgtgtg ctgggcaccc 1020
 63 tactatgtgc tacagctgac ccagttgtcc atcagccgcc cgaccctcac ctttgtctac 1080
 65 ttatacaatg cggccatcag cttggctat gccaacagct gcctcaaccc ctttgtgtac 1140
 67 atcgtgctct gtgagacgtt ccgcaaacgc ttggctctgt cggtaagcc tgcagcccg 1200
 69 gggcagcttc gcgcgttcag caacgctcag acggctgacg aggagaggac agaaagcaa 1260
 71 ggcacctga 1269
 74 <210> SEQ ID NO: 2
 75 <211> LENGTH: 422
 76 <212> TYPE: PRT
 77 <213> ORGANISM: HOMO SAPIENS
 79 <400> SEQUENCE: 2
 81 Met Ser Val Gly Ala Met Lys Lys Gly Val Gly Arg Ala Val Gly Leu
 82 1 5 10 15

ENTERED

RAW SEQUENCE LISTING DATE: 10/04/2001
PATENT APPLICATION: US/09/885,478 TIME: 17:56:10

Input Set : A:\PTO_VSK.txt
Output Set: N:\CRF3\10042001\I885478.raw

85 Gly Gly Gly Ser Gly Cys Gln Ala Thr Glu Glu Asp Pro Leu Pro Asp
86 20 25 30
89 Cys Gly Ala Cys Ala Pro Gly Gln Gly Gly Arg Arg Trp Arg Leu Pro
90 35 40 45
93 Gln Pro Ala Trp Val Glu Gly Ser Ser Ala Arg Leu Trp Glu Gln Ala
94 50 55 60
97 Thr Gly Thr Gly Trp Met Asp Leu Glu Ala Ser Leu Leu Pro Thr Gly
98 65 70 75 80
101 Pro Asn Ala Ser Asn Thr Ser Asp Gly Pro Asp Asn Leu Thr Ser Ala
102 85 90 95
105 Gly Ser Pro Pro Arg Thr Gly Ser Ile Ser Tyr Ile Asn Ile Ile Met
106 100 105 110
109 Pro Ser Val Phe Gly Thr Ile Cys Leu Leu Gly Ile Ile Gly Asn Ser
110 115 120 125
113 Thr Val Ile Phe Ala Val Val Lys Lys Ser Lys Leu His Trp Cys Asn
114 130 135 140
117 Asn Val Pro Asp Ile Phe Ile Ile Asn Leu Ser Val Val Asp Leu Leu
118 145 150 155 160
121 Phe Leu Leu Gly Met Pro Phe Met Ile His Gln Leu Met Gly Asn Gly
122 165 170 175
125 Val Trp His Phe Gly Glu Thr Met Cys Thr Leu Ile Thr Ala Met Asp
126 180 185 190
129 Ala Asn Ser Gln Phe Thr Ser Thr Tyr Ile Leu Thr Ala Met Ala Ile
130 195 200 205
133 Asp Arg Tyr Leu Ala Thr Val His Pro Ile Ser Ser Thr Lys Phe Arg
134 210 215 220
137 Lys Pro Ser Val Ala Thr Leu Val Ile Cys Leu Leu Trp Ala Leu Ser
138 225 230 235 240
141 Phe Ile Ser Ile Thr Pro Val Trp Leu Tyr Ala Arg Leu Ile Pro Phe
142 245 250 255
145 Pro Gly Gly Ala Val Gly Cys Gly Ile Arg Leu Pro Asn Pro Asp Thr
146 260 265 270
149 Asp Leu Tyr Trp Phe Thr Leu Tyr Gln Phe Phe Leu Ala Phe Ala Leu
150 275 280 285
153 Pro Phe Val Val Ile Thr Ala Ala Tyr Val Arg Ile Leu Gln Arg Met
154 290 295 300
157 Thr Ser Ser Val Ala Pro Ala Ser Gln Arg Ser Ile Arg Leu Arg Thr
158 305 310 315 320
161 Lys Arg Val Thr Arg Thr Ala Ile Ala Ile Cys Leu Val Phe Phe Val
162 325 330 335
165 Cys Trp Ala Pro Tyr Tyr Val Leu Gln Leu Thr Gln Leu Ser Ile Ser
166 340 345 350
169 Arg Pro Thr Leu Thr Phe Val Tyr Leu Tyr Asn Ala Ala Ile Ser Leu
170 355 360 365
173 Gly Tyr Ala Asn Ser Cys Leu Asn Pro Phe Val Tyr Ile Val Leu Cys
174 370 375 380
177 Glu Thr Phe Arg Lys Arg Leu Val Leu Ser Val Lys Pro Ala Ala Gln
178 385 390 395 400
181 Gly Gln Leu Arg Ala Val Ser Asn Ala Gln Thr Ala Asp Glu Glu Arg

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/885,478

DATE: 10/04/2001
TIME: 17:56:10

Input Set : A:\PTO_VSK.txt
Output Set: N:\CRF3\10042001\I885478.raw

182	405	410	415	
185	Thr Glu Ser Lys Gly Thr			
186		420		
189	<210> SEQ ID NO: 3			
190	<211> LENGTH: 1214			
191	<212> TYPE: DNA			
192	<213> ORGANISM: RATTUS NORVEGICUS			
194	<400> SEQUENCE: 3			
195	gcaggcgacc tgacccggct gcatggatct gcaaaccctcg ttgctgtcca ctggccccaa	60		
197	tgcacgcaac atctccgatg gccaggataa tctcacattt cccgggtcac ctccctcgac	120		
199	aggagtgtc tcctacatca acatcattat gccttccgtg tttggtagcca tctgtctcct	180		
201	gggcacatcg gaaaaactcca cggtcatctt tgctgtgtg aagaagtcca agctacactg	240		
203	gtgcagcaac gtccccgaca tcttcatcat caacctctct gtgggtggatc tgctcttcct	300		
205	gctgggcattt ccttcatga tccaccagct catggggAAC ggcgtctggc actttgggg	360		
207	aaccatgtgc accctcatca cagccatgga cgccaaacagt cagttacta gcacccat	420		
209	cctgactgcc atgaccattt accgctactt ggccaccgtc caccctatct cctccaccaa	480		
211	gttccggaaag ccctccatgg ccaccctgggt gatctgcctc ctgtggcgc ttccttcat	540		
213	cagtatcacc cctgtgtggc tctacgcccag gtcattccc ttcccagggg gtgctgtgg	600		
215	ctgtggcatc cgccctgcca accccggacac tgacctctac tggttcactc tgtaccagtt	660		
217	tttcctggcc ttgcgccttc cggtgtgggt cattaccgccc gcatacgtga aaatactaca	720		
219	gcccacatcg tcttcgggtt ccccaacccctc ccaacgcaggc atccggcttc ggacaaagag	780		
221	ggtgacccgc acggccattt ccattctgtct ggtttttt gtgtgtgtggg caccctacta	840		
223	tgtgctgcag ctgacccgc tgcacatcg cccggccacc ctcacgtttt tctacttgtt	900		
225	caacgcggcc atcagcttgg gctatgttaa cagctgcctt aaccctttt tgtacatagt	960		
227	gctctgtgag acctttcgaa aacgcttgggt gttgtcagt gacgcctgcag cccagggca	1020		
229	gctccgcacg gtcagcaacg ctcagacagc tgcgtgggg aggacagaaa gcaaaggcac	1080		
231	ctgacaattt cccagtcgccc tccaaatcgtag gcccacccat caaaccgtgg ggagagatac	1140		
233	tgagattaaa cccaggctt ccctgggaga atgcagaggc tggaggctgg gggctttag	1200		
235	caaccacatt ccac	1214		
238	<210> SEQ ID NO: 4			
239	<211> LENGTH: 353			
240	<212> TYPE: PRT			
241	<213> ORGANISM: RATTUS NORVEGICUS			
243	<400> SEQUENCE: 4			
245	Met Asp Leu Gln Thr Ser Leu Leu Ser Thr Gly Pro Asn Ala Ser Asn			
246	1 5 10 15			
249	Ile Ser Asp Gly Gln Asp Asn Leu Thr Leu Pro Gly Ser Pro Pro Arg			
250	20 25 30			
253	Thr Gly Ser Val Ser Tyr Ile Asn Ile Ile Met Pro Ser Val Phe Gly			
254	35 40 45			
257	Thr Ile Cys Leu Leu Gly Ile Val Gly Asn Ser Thr Val Ile Phe Ala			
258	50 55 60			
261	Val Val Lys Lys Ser Lys Leu His Trp Cys Ser Asn Val Pro Asp Ile			
262	65 70 75 80			
265	Phe Ile Ile Asn Leu Ser Val Val Asp Leu Leu Phe Leu Leu Gly Met			
266	85 90 95			
269	Pro Phe Met Ile His Gln Leu Met Gly Asn Gly Val Trp His Phe Gly			
270	100 105 110			
273	Glu Thr Met Cys Thr Leu Ile Thr Ala Met Asp Ala Asn Ser Gln Phe			

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/885,478

DATE: 10/04/2001
TIME: 17:56:10

Input Set : A:\PTO_VSK.txt
Output Set: N:\CRF3\10042001\I885478.raw

274	115	120	125
277	Thr Ser Thr Tyr Ile Leu Thr Ala Met Thr Ile Asp Arg Tyr Leu Ala		
278	130	135	140
281	Thr Val His Pro Ile Ser Ser Thr Lys Phe Arg Lys Pro Ser Met Ala		
282	145	150	155
285	160	165	170
286	175	180	185
289	190	195	200
290	205	210	215
293	220	225	230
294	240	245	250
297	255	260	265
298	270	275	280
301	285	290	295
302	300	305	310
305	320	325	330
306	325	330	335
309	335	340	345
310	350		
313			
314			
317			
318			
321			
322			
325			
326			
329			
330			
333	Thr		
337	<210> SEQ ID NO: 5		
338	<211> LENGTH: 26		
339	<212> TYPE: DNA		
340	<213> ORGANISM: ARTIFICIAL SEQUENCE		
342	<220> FEATURE:		
343	<223> OTHER INFORMATION: PRIMER		
345	<400> SEQUENCE: 5		
346	gggaactcca cggtcatctt cgcggt		26
349	<210> SEQ ID NO: 6		
350	<211> LENGTH: 26		
351	<212> TYPE: DNA		
352	<213> ORGANISM: ARTIFICIAL SEQUENCE		
354	<220> FEATURE:		
355	<223> OTHER INFORMATION: PRIMER		
357	<400> SEQUENCE: 6		
358	tagcggtaa tggccatggc ggtcag		26
361	<210> SEQ ID NO: 7		
362	<211> LENGTH: 45		
363	<212> TYPE: DNA		

RAW SEQUENCE LISTING DATE: 10/04/2001
 PATENT APPLICATION: US/09/885,478 TIME: 17:56:10

Input Set : A:\PTO_VSK.txt
 Output Set: N:\CRF3\10042001\I885478.raw

```

364 <213> ORGANISM: ARTIFICIAL SEQUENCE
366 <220> FEATURE:
367 <223> OTHER INFORMATION: PROBE
369 <400> SEQUENCE: 7
370 ctccctggca tgcccttcat gatccaccag ctcatggca atggg 45
373 <210> SEQ ID NO: 8
374 <211> LENGTH: 25
375 <212> TYPE: DNA
376 <213> ORGANISM: ARTIFICIAL SEQUENCE
378 <220> FEATURE:
379 <223> OTHER INFORMATION: PRIMER
381 <400> SEQUENCE: 8
382 cttcttaggcc tgtacggaag tgtta 25
385 <210> SEQ ID NO: 9
386 <211> LENGTH: 27
387 <212> TYPE: DNA
388 <213> ORGANISM: ARTIFICIAL SEQUENCE
390 <220> FEATURE:
391 <223> OTHER INFORMATION: PRIMER
393 <400> SEQUENCE: 9
394 gttgtggttt gtccaaactc atcaatg 27
397 <210> SEQ ID NO: 10
398 <211> LENGTH: 37
399 <212> TYPE: DNA
400 <213> ORGANISM: ARTIFICIAL SEQUENCE
402 <220> FEATURE:
403 <223> OTHER INFORMATION: PRIMER
405 <400> SEQUENCE: 10
406 cgcgatcca ttatgtctgc actccgaagg aaatttg 37
409 <210> SEQ ID NO: 11
410 <211> LENGTH: 38
411 <212> TYPE: DNA
412 <213> ORGANISM: ARTIFICIAL SEQUENCE
414 <220> FEATURE:
415 <223> OTHER INFORMATION: PRIMER
417 <400> SEQUENCE: 11
418 cgcgattct tatgtgaagc gatcagagtt catttttc 38
421 <210> SEQ ID NO: 12
422 <211> LENGTH: 34
423 <212> TYPE: DNA
424 <213> ORGANISM: ARTIFICIAL SEQUENCE
426 <220> FEATURE:
427 <223> OTHER INFORMATION: PRIMER
429 <400> SEQUENCE: 12
430 gcgggatccg ctatggctgg tgattctagg aatg 34
433 <210> SEQ ID NO: 13
434 <211> LENGTH: 29
435 <212> TYPE: DNA
436 <213> ORGANISM: ARTIFICIAL SEQUENCE
  
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/885,478

DATE: 10/04/2001
TIME: 17:56:11

Input Set : A:\PTO_VSK.txt
Output Set: N:\CRF3\10042001\I885478.raw

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date